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**NCIC HPV**
Sent by: Mary-Beth Weaver

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To: NCIC HPV, moran.matthew@epa.gov
cc:
cc:
Subject: Environmental Defense comments on the Amine Heads Category

Richard_Denison@environmentaldefense.org on 08/14/2003 09:47:54 AM

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cc: MTC@mchsi.com, kflorini@environmentaldefense.org, rdenison@environmentaldefense.org

Subject: Environmental Defense comments on the Amine Heads Category

(Submitted via Internet 8/14/03 to oppt.ncic@epa.gov, hpv.chemrtk@epa.gov, boswell.karen@epa.gov, chem.rtk@epa.gov, MTC@mchsi.com, Edwin.L.Mongan-1@usa.dupont.com, and Rauckman@toxicsolutions.com)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for the Amine Heads Category.

E.I. du Pont de Nemours & Company and Solutia, Inc., in support of the US High Production Challenge, have submitted a Robust Summary/Test Plan describing available data for three six-carbon aliphatic diamines. The sponsors propose that these three chemicals -- 1,6-hexanediamine (HMD) (CAS # 124-09-4), 1,2-cyclohexanediamine (DCH) (CAS # 694-83-7), and 2-methyl-1,5-pentanediamine (MPMD) (CAS #15520-10-2) -- be considered together as a category. Upon review of this submission and related information, we agree that these chemicals have very similar structures, as well as similar chemical/physical and toxicological properties. Therefore, we support their consideration as the Amines Heads Category.



According to the sponsor, these three aliphatic diamines arise together in the production of hexamethylenediamine for use in production of Nylon-6,6. The relative and actual amounts of the three chemicals produced vary depending on reaction conditions used by different manufacturers, but HMD is usually the dominant product. Unlike DCH and MPMD, HMD is not a high production volume (HPV) chemical under the Challenge Program; however, documents describing its use and studies of its properties and toxicity have been previously developed under the Organization for Economic Co-operation and Development (OECD) Screening Information Data Set (SIDS) Program. Much of that information is included in the present submission, along with available information for the other two members of the proposed category. The similar structures and properties of these chemicals support bridging of data available for HMD to fill remaining data gaps identified for DCH and MPMD.

Our review of the Test Plan for this proposed category indicates it is very well-organized and well-written to describe available data on HMD and each of the other members of the category. All required SIDS elements have been addressed for DCH and MPMD using measured data or model estimates or by bridging data from appropriate studies of HMD. Studies described briefly for these chemicals in the Test Plan are supported by an extensive Robust Summary. The Robust Summary consists of a separate Appendix describing a single best study for each SIDS element for HMD and for most SIDS elements for DCH and MPMD. The single-best study addressing each SIDS element is carefully referenced and additional studies are referenced for most elements. Most of the studies described for each of these compounds,

or mixtures containing these compounds, are current and conducted under GLP.

The Test Plan for this category presents a good description of measures taken by the sponsors to protect employees who work with these chemicals. However, this discussion also makes it clear that these chemicals may be transported from sites of production to sites of use, and thus raises the question of what measures are to be taken to limit human and environmental exposure in case of a spill or other release during transport or at the sites of use. We realize these chemicals are not highly toxic and they are readily soluble in water; however, they are caustic and exposure could result in chemical burns. Thus, inclusion of some description of precautionary and remedial measures to be taken in case of a spill or other release would be desirable.

In summary, we compliment the sponsors on their submission of a thorough and very well-organized Robust Summary/Test Plan. We agree with the sponsors that these chemicals should be considered together as a category and that no additional work is necessary to satisfy the requested SIDS elements.

Thank you for this opportunity to comment.

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